

# Work Order ID 66106

Monday, February 07, 2011 7:26:09 AM

Page 1

Item ID: D350-636-016

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00

Required Date: 2/18/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4168

A

IIN-D350-636

H

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-016 CHG 001

N/A

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 66106**

Monday, February 07, 2011 7:26:10 AM



Page 2

Item ID: D350-636-016

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 2/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

0.00



Skidtubes

Skidtubes

0.00

Memo

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.

4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting

5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as per dwg D4168

6- Drill pilot holes as per Dwg D4168 sheet 5 (D4168-1 details). Drill using drill Jig DT8150 &amp; DT8863A for first side only DT8863B for second side (detail K)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail K.  
\*\*\*SECOND SIDE\*\*\*

8-Open up holes for Detail K to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D4168. Open up holes for ground handling and detail C to 0.500" (8 holes per side)

9-Open up holes of Detail J to 0.297" (total of 2 holes per side) + 201 iplace per side

10-Weld D2744 Cap as per Dwg D4168 and DS1004. Fill grooves in bend left

① BE 11/02/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 3

Item ID: D350-636-016

Accept

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates. RH

Start Date: 2/4/2011 Start Qty: 1.00

Required Date: 2/18/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

from bending as per QSI 004  
A/R Aluminum Rod batch:

7116577

11-Grind welds flush as per Dwg D4168

JB 11/02/14

120



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

Sulorly

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Sulorly

(H)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 4

Item ID: D350-636-016

Accept

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00

Required Date: 2/18/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control



Setup Start



Stop



Cust Item ID:

Customer:

Run Start



Stop



1 0 BE 11/02/14

DP 11-2-15

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 5

Item ID: D350-636-016

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00

Required Date: 2/18/2011 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open up holes of Detail L and ground handling to 0.625" (total of 8 holes per side)  
as per dwg D4168.

2-Open up holes of Detail K to 0.750" (total of 4 holes per side)  
as per dwg D4168.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes of Detail K,L, ground handling and float holes per dwg D4168  
(welding instructions on sheet 9)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291

batch:

exp. date:

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 & QSI004  
(welding instructions on sheet 8)

A/R Aluminum Rod

batch:

9- At section AP-AP drill out x-bolt spacer to 0.404"

10-Grind welds flush as per Dwg D4168

BE 11/02/15



# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM



Page 6

Item ID: D350-636-016

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 2/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

11-Spot face ground handling holes section (total of 4 places per side) as per dwg D4168

12- C'bore section CH-CH

13- Deburr holes

170



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

Sul2/19

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Sul2/19

(X)

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 7

Item ID: D350-636-016

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00

Cust Item ID:

Required Date: 2/18/2011 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

190

Pressure Wash per QSI005 4.3

0.00

HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

⇒ m-l 11/02/28

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Powdercoat

M 115951

Memo

0.00

Powder Coating

START TIME: 11:05  
OVEN TEMPERATURE: 320°  
FINISH TIME: 11:35

1 BR 11-2-28.

205

Wing Walk as per dwg QSI005 4.4 Batch

0.00

HandFinish

Memo

0.00

Hand Finishing

per previous orders

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 8

Item ID: D350-636-016

Accept

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00

Required Date: 2/18/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Inspect for foreign object per QSI 024

1 φ 24 11/03/01

220

HandFinishing

0.00



HandFinish

Memo

0.00

Hand Finishing

1- Install inserts as per Dwg D4168

1 φ 24 11/03/01

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 9

Item ID: D350-636-016

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube STD w/ Training Wearplates. RH

Start Date: 2/4/2011 Start Qty: 1.00

Cust Item ID:

Required Date: 2/18/2011 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

230

0.00



HandFinish

HandFinishing

Hand Finishing

Memo

0.00

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: NA

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168

SIKA FLEX 241

BATCH: 11115114

EXP DATE: 11/02

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: 11114189

5-Coat all exposed fasteners with "LPS Procyon" batch: 11114596

240

QC5- Inspect part completeness to step on W/O

0.00



QC

Quality Control

Memo

0.00

*Signature*

*Handwritten mark*

*Handwritten notes: 1, 0, M, 1103107*

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 10

Item ID: D350-636-016

Accept

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00

Required Date: 2/18/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.  
Code Qty Qty Number Stamp

250

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

260

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

\*\*\*\*\*ensure antiseize is on AN8C21A bolts\*\*\*\*\*

270

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD350-636-016

Location: \_\_\_\_\_

PPP rev: \_\_\_\_\_

PP 63141

11/31/11

# Work Order ID 66106

Monday, February 07, 2011 7:26:10 AM

Page 11

Item ID: D350-636-016

Accept

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011 Start Qty: 1.00

Required Date: 2/18/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: Date:

QC: Date:

Tooling: Date:

SPC (Y/N): Date:

Run Start

Stop

Sequence ID/  
Work Center ID

280



QC

Quality Control

Operation  
Description

QC21- Final Inspection - Work Order Release

Memo

Set Up/  
Run Hours

0.00

0.00

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

W103/01

U 1103-01

# Picklist Print

Monday, February 07, 2011 7:26:05 AM

Page 1

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH


Start Date: 2/4/2011

Required Date: 2/18/2011


Start Qty: 1.00

Required Qty: 1.00


Comments: IPP rev:A 10.09.28 new issue DD ver:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C34A  BOLT		Purchased	No			230	Each	73.0000	1	11/2/08			

Location	Loc Qty	Loc Code
ST353	73	
115767	3	
116003	20	
116075	50	

AN3C36A  BOLT		Purchased	No			230	Each	101.0000	4	11/2/08			
--	--	-----------	----	--	--	-----	------	----------	---	---------	--	--	--

Location	Loc Qty	Loc Code
ST353	101	
109771	6	
116050	8	
116381	37	
116590	50	

AN3C37A  BOLT		Purchased	No			230	Each	8.0000	1	11/2/08			
--	--	-----------	----	--	--	-----	------	--------	---	---------	--	--	--

Location	Loc Qty	Loc Code
ST353	1	
114801	1	
ST354	7	
116381	7	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Monday, February 07, 2011 7:26:05 AM

Page 2

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C42A

Purchased No

230 Each

68.0000

1

1



BOLT



11/2/2011

## Location

## Loc Qty

## Loc Code

ST354

68

106176

68

Purchased No

250 Each

89.0000

2

2

AN960JD816



1/2" washer, Alum



11/03/01

## Location

## Loc Qty

## Loc Code

ST348

89

106043

89

Manufactured No

230 Each

11.0000

1

1

D3488-042



Blade Fitting Assembly, RH



11/03/01

## Location

## Loc Qty

## Loc Code

FP008

10

59643

1

62003

9

FP18

1

61690

1

Manufactured No

160 Each

69.0000

4

4

D3490-1



Cross Bolt Spacer



BE 11/02/15

## Location

## Loc Qty

## Loc Code

LG

69

59424

3

62450

52

64005

14

4

Monday, February 07, 2011 7:26:06 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, February 07, 2011 7:26:06 AM

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

D3490-3

Manufactured No

160

Each

43.0000

4

4



Cross Bolt Spacer



BE 11/02/15

## Location

## Loc Qty

## Loc Code

LG

43

60294

1

63556

24

64006

18

D3873-1

Manufactured No

230

Each

209.0000

7



Bushing



4  
11/2/08

## Location

## Loc Qty

## Loc Code

ST089

100

64567

100

ST092

106

62197

4

63314

2

64760

100

ST093

3

57615

3

D4154-041

Manufactured No

230

Each

0.0000

1



Wearplate Assembly

B65092



7  
1 X 1

11/03/01

D4170-1

Manufactured No

230

Each

3.0000

4

4



Bushing



BE 11/02/15

## Location

## Loc Qty

## Loc Code

LG

3

63322

3

266158

(x4)

Monday, February 07, 2011 7:26:06 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, February 07, 2011 7:26:06 AM

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

D4171-1

Manufactured No

230

Each

22.0000

1

1



Bushing



*11/11/28*

Location

Loc Qty

Loc Code

ST135

22

62710

2

65646

20

MS21043-3

Purchased

No

230

Each

1,422.000

5

5



*11/11/28*

Nut

Location

Loc Qty

Loc Code

FG

76

103691

76

ST301

1346

112314

1346

NAS1149C0363R

Purchased

No

230

Each

5,147.000

9

9



*M113889 11/11/28*

Washer

Location

Loc Qty

Loc Code

ST297

5147

113524

33

113889

210

114742

4904

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, February 07, 2011 7:26:06 AM

Page 5

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L

Purchased - No

230

Each

308.0000

4

4



WASHER



11/2/2011

## Location

## Loc Qty

## Loc Code

FG

40

102472

40

ST277

268

111819

34

113362

234

D2744

Manufactured No

110

Each

57.0000

1

1



Cap



BE 11/02/14

## Location

## Loc Qty

## Loc Code

LG

29

65086

29

ST

28

62715

28

D2600-3-BENT

Manufactured No

110

Each

8.0000

1

1



Extrusion Bent



BE 11/02/14

## Location

## Loc Qty

## Loc Code

LG

8

61634

2

62764

1

64434

5

Monday, February 07, 2011 7:26:06 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Monday, February 07, 2011 7:26:06 AM

Page 6

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

D2743 Manufactured No 160 Each 138.0000 8 8  
Crossbolt Spacer

BE 11/02/15

Location	Loc Qty	Loc Code
LG	138	
50281	10	
57953	2	
59111	10	
61844	32	
64003	84	

D2739 Manufactured No 160 Each 6.0000 1 1  
350 I Beam

BE 11/02/15

Location	Loc Qty	Loc Code
LG	6	
64448	6	

ALS4-1032-225 Purchased No 230 Each 4,020.000 4 4  
Insert

11/12/15

Location	Loc Qty	Loc Code
PK011	4020	
110768	4020	

D3492-041 Manufactured No 230 Each 93.0000 8 8  
Plug Assembly

11/03/01 PTO

Location	Loc Qty	Loc Code
FP013	93	
59114	1	
62210	3	
63994	29	
65068	60	

Monday, February 07, 2011 7:26:06 AM

Shop Packet Print

Page 6

W/O: 66106		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
11/03/01	230	Assemble with NAS 1611-010 110" ring <del>11113524</del> 1110915	<del>11</del> 11	11/03/01 11-03-01	15		11/03/01	

Part No: D350-636-016 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Monday, February 07, 2011 7:26:06 AM

Page 7

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

36.0000

1

1



BOLT



11/12/2011

## Location

## Loc Qty

## Loc Code

ST346

36

114442

5

115188

5

115960

26

AN6C44A

Purchased

No

230

Each

47.0000

4

4



BOLT



11/12/2011

## Location

## Loc Qty

## Loc Code

FG

2

103964

2

ST344

45

111649

2

114653

1

115936

42

MS21083C8

Purchased

No

230

Each

43.0000

1

1



NUT



11/12/2011

## Location

## Loc Qty

## Loc Code

ST303

43

113845

5

114934

3

115594

4

115884

31

Monday, February 07, 2011 7:26:06 AM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, February 07, 2011 7:26:06 AM

Page 8

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

D3631-1 Manufactured No 230 Each 144.0000 8 8  
Washer

## Location

## Loc Qty

## Loc Code

ST072

144

63647

144

AN960C10L NAS1149C0332 Purchased No

230 Each

25.0000 4 4

washer

## Location

## Loc Qty

## Loc Code

ST245

25

107534

25

D2745 Manufactured No

230 Each

121.0000 8 8

Bushing

## Location

## Loc Qty

## Loc Code

ST023

121

52311

5

59112

4

61988

4

63315

108

AN960C816L Purchased No

230 Each

0.0000 1 1

WASHER NAS 1149C08332R / M114915

B63375

v4

x4

(X1)

11/03/10

Monday, February 07, 2011 7:26:06 AM

Shop Packet Print

Page 8

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, February 07, 2011 7:26:06 AM

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

D3492-043

Manufactured No

230

Each

41.0000

8

8



Plug Assembly

Location

Loc Qty

Loc Code

FP

2

54682

2

FP013

39

59117

1

59190

4

63996

2

65070

32

MA 11/02/01 PTO=)

AN3C6A

Purchased

No

230

Each

359.0000

4

4



BOLT

Location

Loc Qty

Loc Code

ST351

359

111982

134

116419

75

116549

50

116704

100

11/12/01

MS21043-6

Purchased

No

230

Each

546.0000

4

4



NUT

Location

Loc Qty

Loc Code

ST301

546

112314

546

11/12/01

W/O: 66106		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11/03/01	230	Assemble with NAS1611-013 "O" Rings M11658Z	jd	11/03/01	x5		

Part No: D350-636-016 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Monday, February 07, 2011 7:26:07 AM

Page 10

Work Order ID: 66106

Parent Item: D350-636-016

Parent Item Name: Skidtube:STD w/ Training Wearplates, RH

Start Date: 2/4/2011

Required Date: 2/18/2011

Start Qty: 1.00

Required Qty: 1.00

D3493-1

Manufactured No

250

Each

32.0000

2

2

Washer

MS21083C8

Purchased

No

250

Each

43.0000

2

2

NUT

AN8C21A

Purchased

No

250

Each

71.0000

2

2

BOLT

D2741

Manufactured

No

250

Each

79.0000

1

Blade, 350 Skidtube

## Location

ST062

62677

## Loc Qty

32

32

## Loc Code

## Location

ST303

113845

114934

115594

115884

## Loc Qty

43

5

3

4

31

## Loc Code

## Location

ST345

113558

114653

115723

116381

## Loc Qty

71

1

2

8

60

## Loc Code

## Location

ST466

60210

61341

63589

## Loc Qty

79

6

33

40

## Loc Code

Monday, February 07, 2011 7:26:07 AM

Shop Packet Print

Page 10

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-8	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

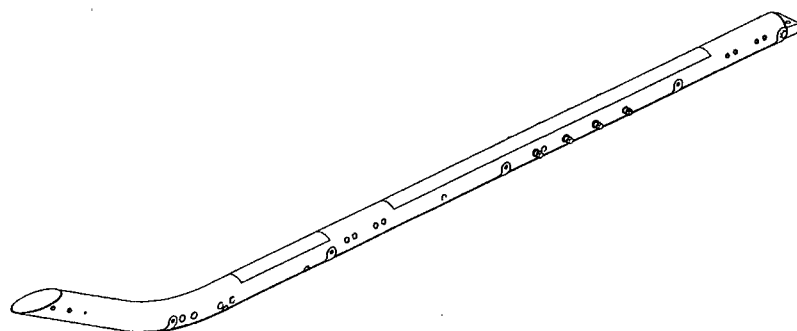
# GENERAL NOTES:

- MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:  
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- WELD PER DART QSI 004
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 KSI  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

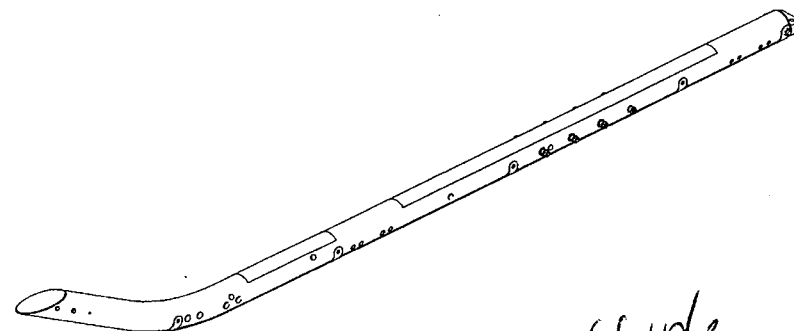
ulo bb106

RELEASED  
2010-09-15

A		NEW ISSUE		SC	10.08.09
REV.		DESCRIPTION		BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC.			
DRAWN	SC	PORT HADLOCK, WA			
CHECKED		DRAWING NO.	D4168	REV. A	
MFG. APPR.				SHEET 1 OF 11	
APPROVED		TITLE	350 SKIDTUBE ASSEMBLY	SCALE	
DE APPR.				NTS	
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			



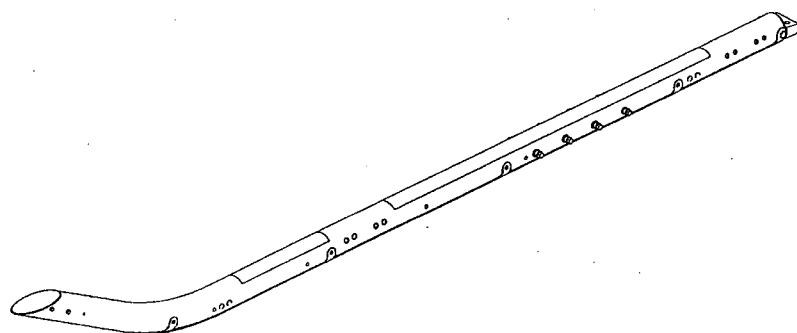
D4168-041 350 SKIDTUBE ASSEMBLY, LH



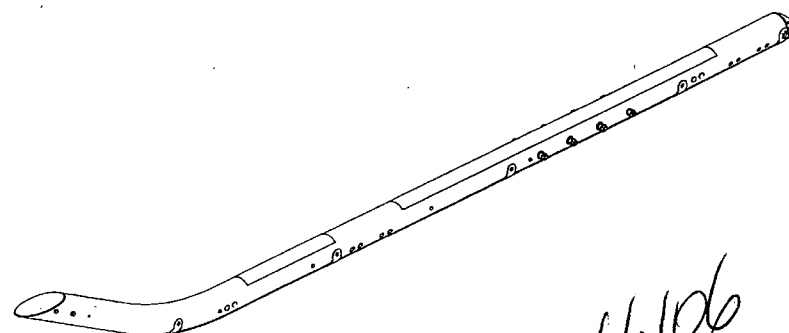
D4168-042 350 SKIDTUBE ASSEMBLY, RH

**RELEASED**  
2010-09-15  
JW

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
DRAWN	SC		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4168	SHEET 2 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	



**D4168-043 350 SKIDTUBE ASSEMBLY, LH**



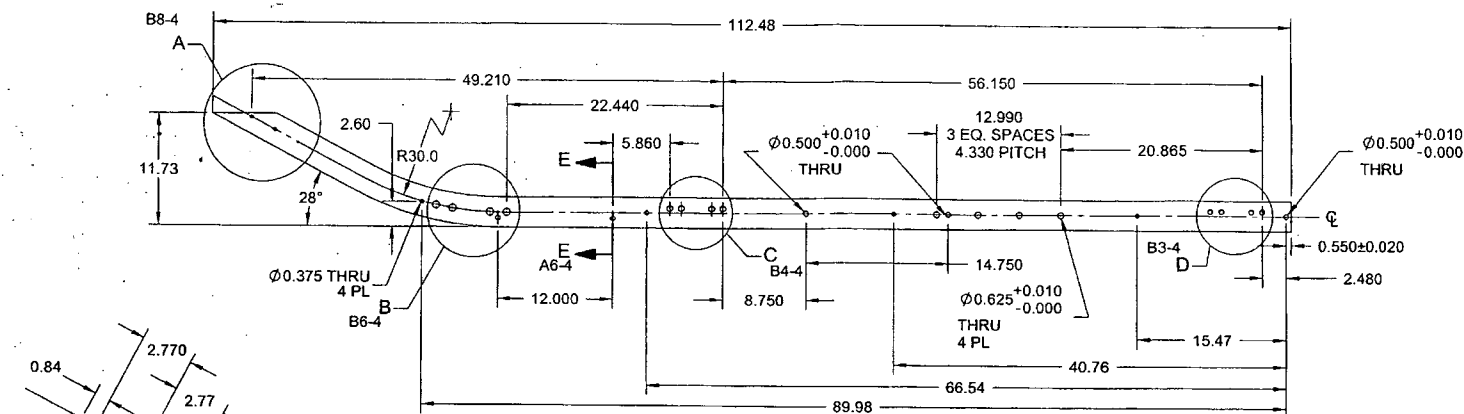
**D4168-044 350 SKIDTUBE ASSEMBLY, RH**

*66106*

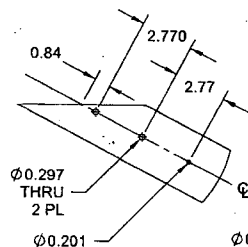
**RELEASED**  
2010-09-15

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	<b>D4168</b>	SHEET 3 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>350 SKIDTUBE ASSEMBLY</b>	NTS
DATE	<b>10.08.09</b>	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

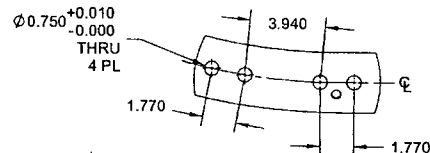
8 7 6 5 4 3 2 1



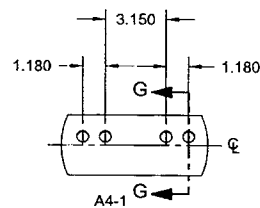
**D4168-1 LH SKIDTUBE**



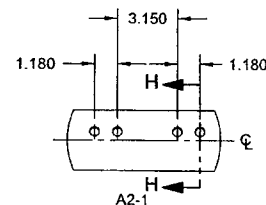
**DETAIL A**  
SCALE 2X



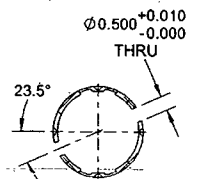
**DETAIL B**  
SCALE 2X



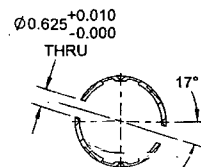
**DETAIL C**  
SCALE 2X



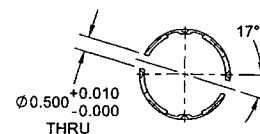
**DETAIL D**  
SCALE 2X



**SECTION E-E**  
SCALE 3X, 2 PL





**SECTION G-G**  
SCALE 3X, 4 PL



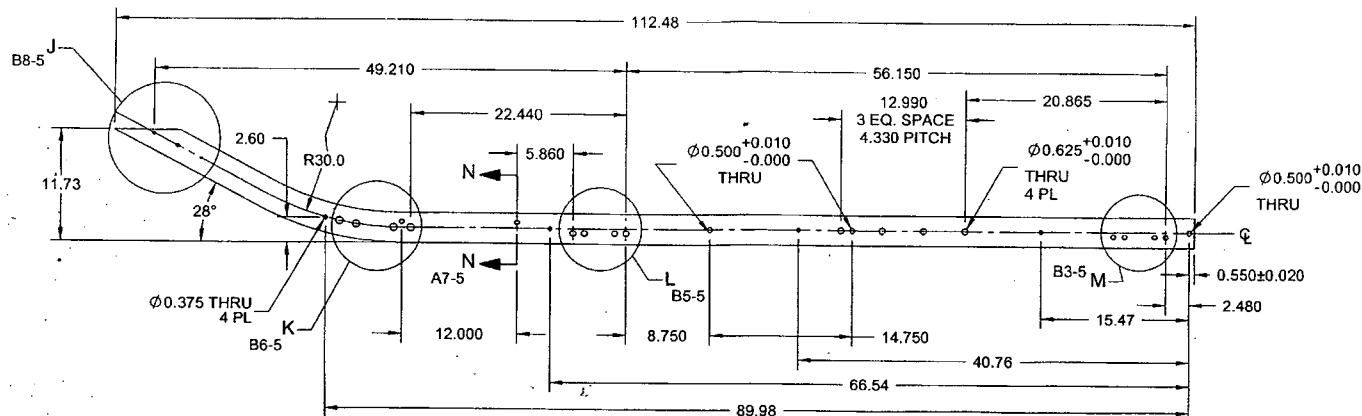
**SECTION H-H**  
SCALE 3X, 4 PL

**RELEASED**  
2010-09-15

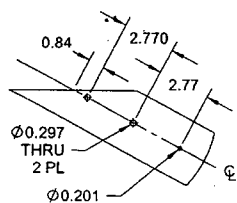
DESIGN	SC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	SC	DRAWING NO.	REV. A
MFG. APPR.		<b>D4168</b>	SHEET 4 OF 11
APPROVED		TITLE	SCALE
DE APPR.		<b>350 SKIDTUBE ASSEMBLY</b>	NTS
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED BY THE COPYRIGHT OWNER THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1

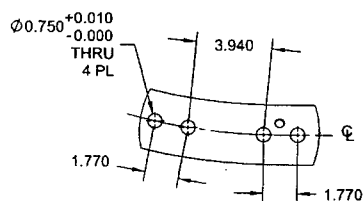
8 7 6 5 4 3 2 1



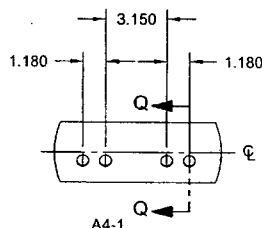
**D4168-2 RH SKIDTUBE**



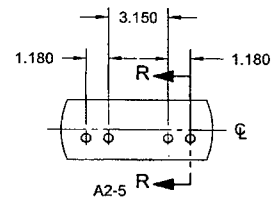
**DETAIL J**  
SCALE 2X



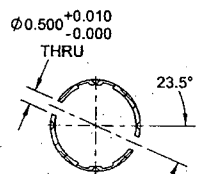
**DETAIL K**  
SCALE 2X



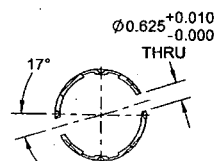
**DETAIL L**  
SCALE 2X



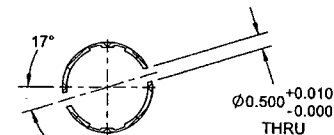
**DETAIL M**  
SCALE 2X



**SECTION N-N**  
SCALE 3X, 2 PL



**SECTION Q-Q**  
SCALE 3X, 4 PL



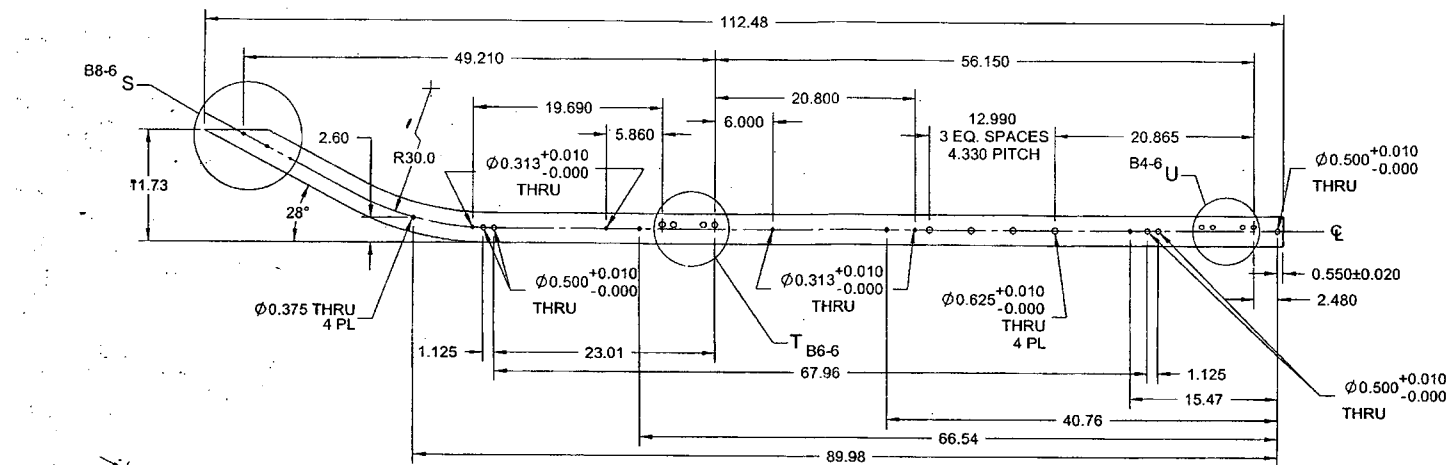
**SECTION R-R**  
SCALE 3X, 4 PL

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 5 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

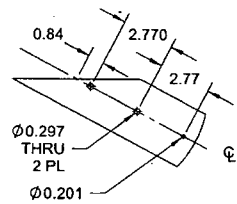
*W6106*  
**RELEASED**  
2010-09-15  
*MD*

8 7 6 5 4 3 2 1

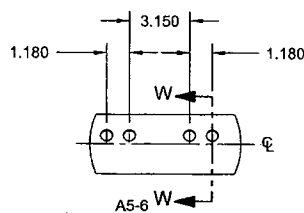
8 7 6 5 4 3 2 1



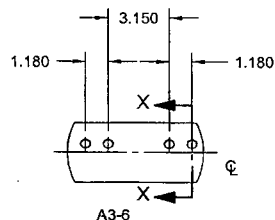
**D4168-3 LH SKIDTUBE**



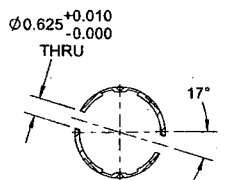
**DETAIL S**  
SCALE 2X



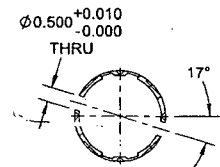
**DETAIL T**  
SCALE 2X



**DETAIL U**  
SCALE 2X



**SECTION W-W**  
SCALE 3X, 4 PL



**SECTION X-X**  
SCALE 3X, 4 PL

*66106*

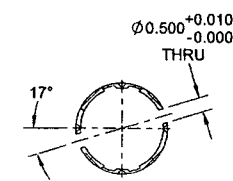
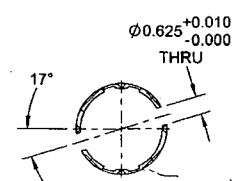
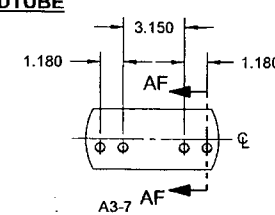
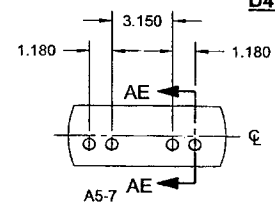
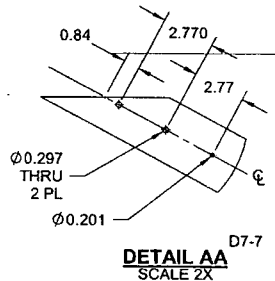
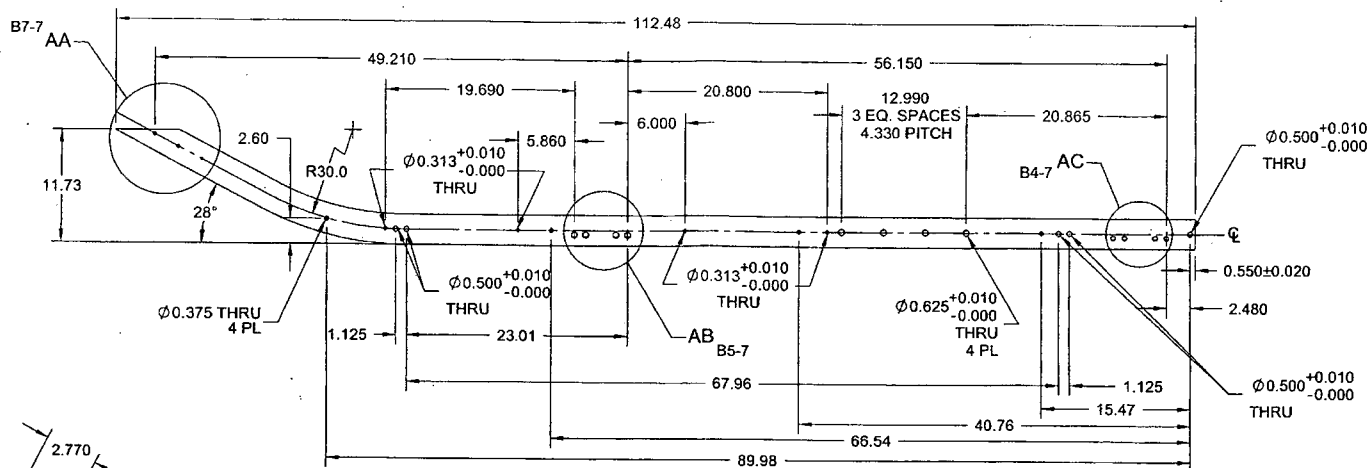
**RELEASED**  
2010-09-15

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	<b>D4168</b>	SHEET 6 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>350 SKIDTUBE ASSEMBLY</b>	NTS
DATE	10.08.09	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

8 7 6 5 4 3 2 1



8 7 6 5 4 3 2 1

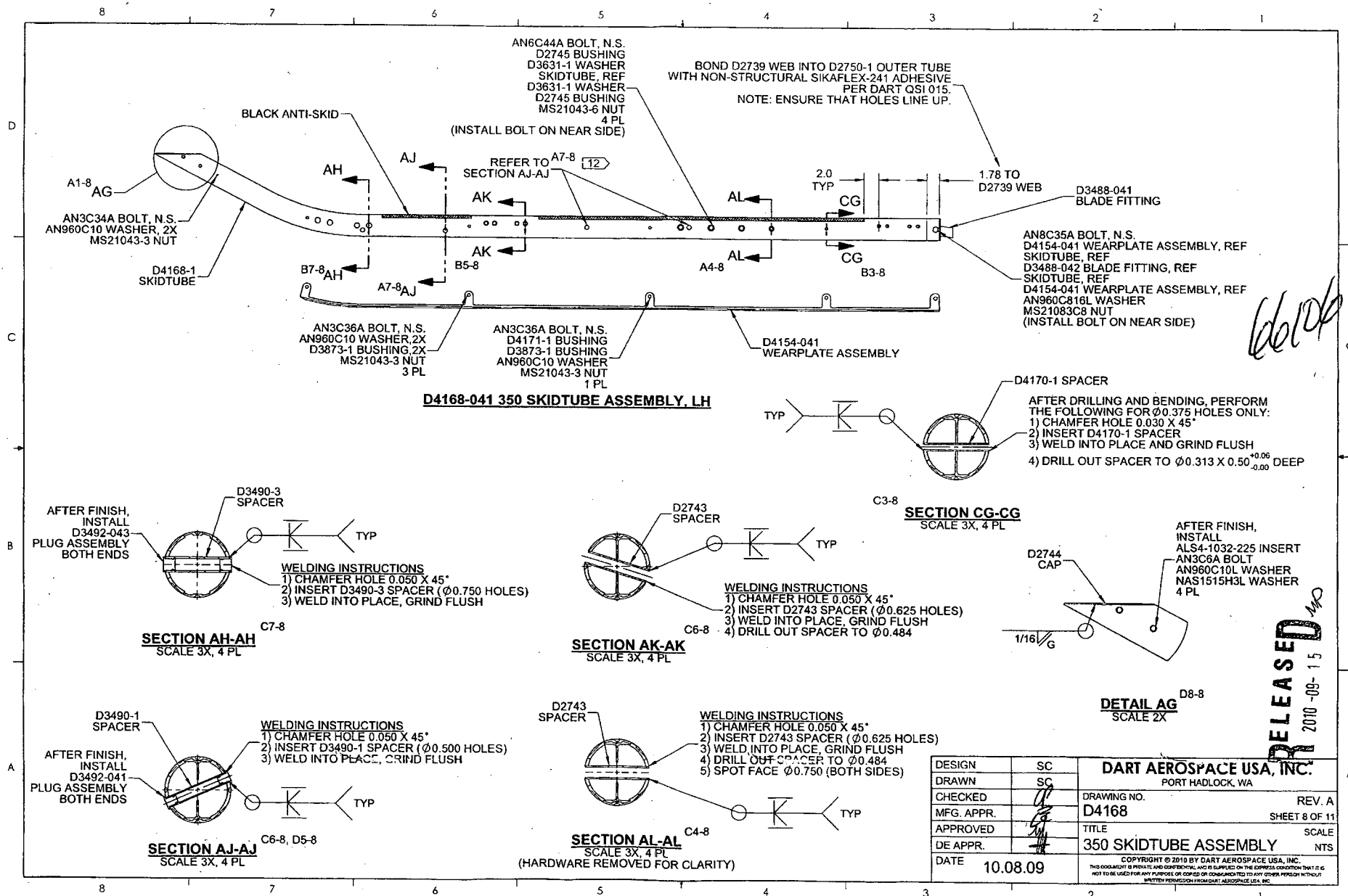


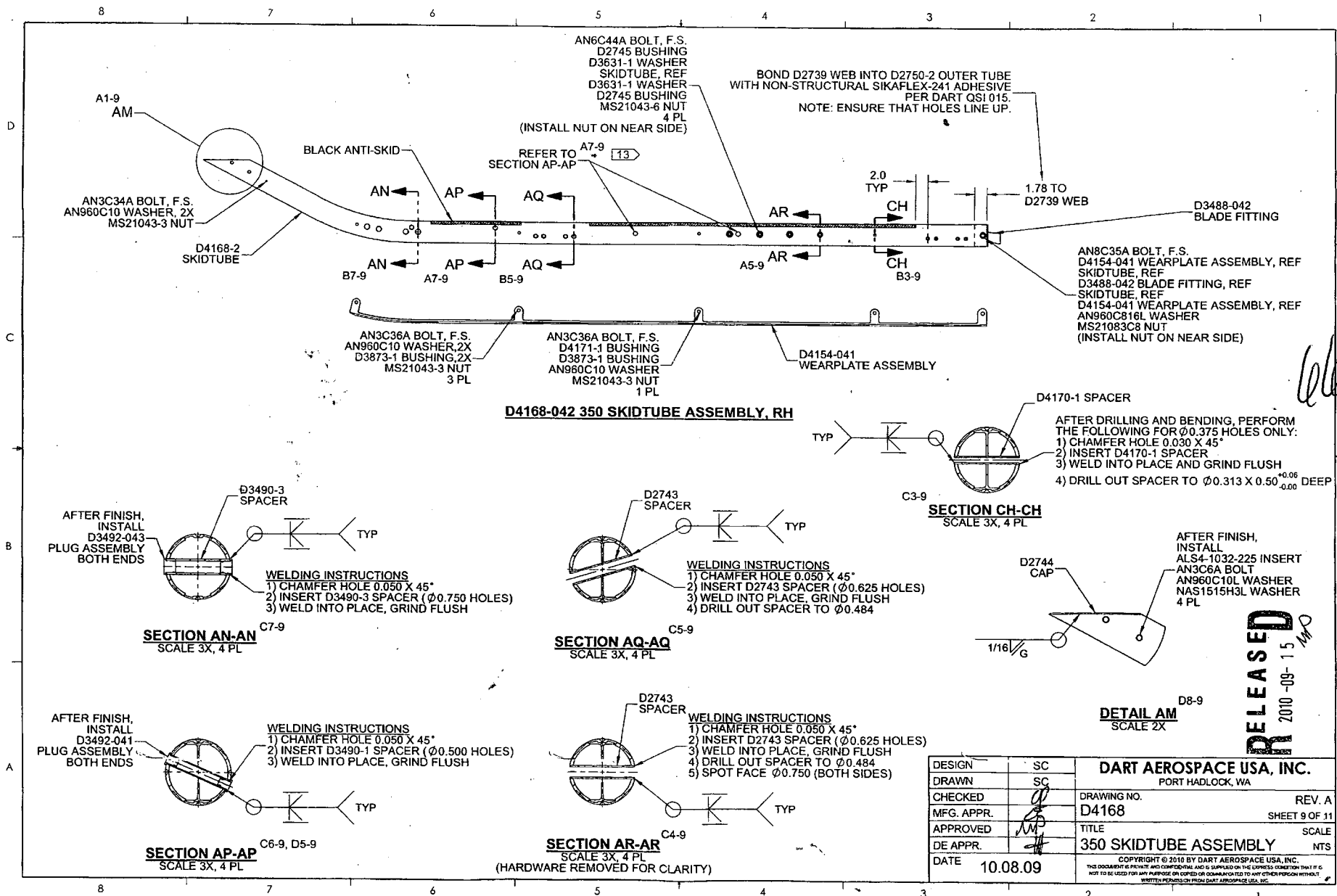
*Weld*

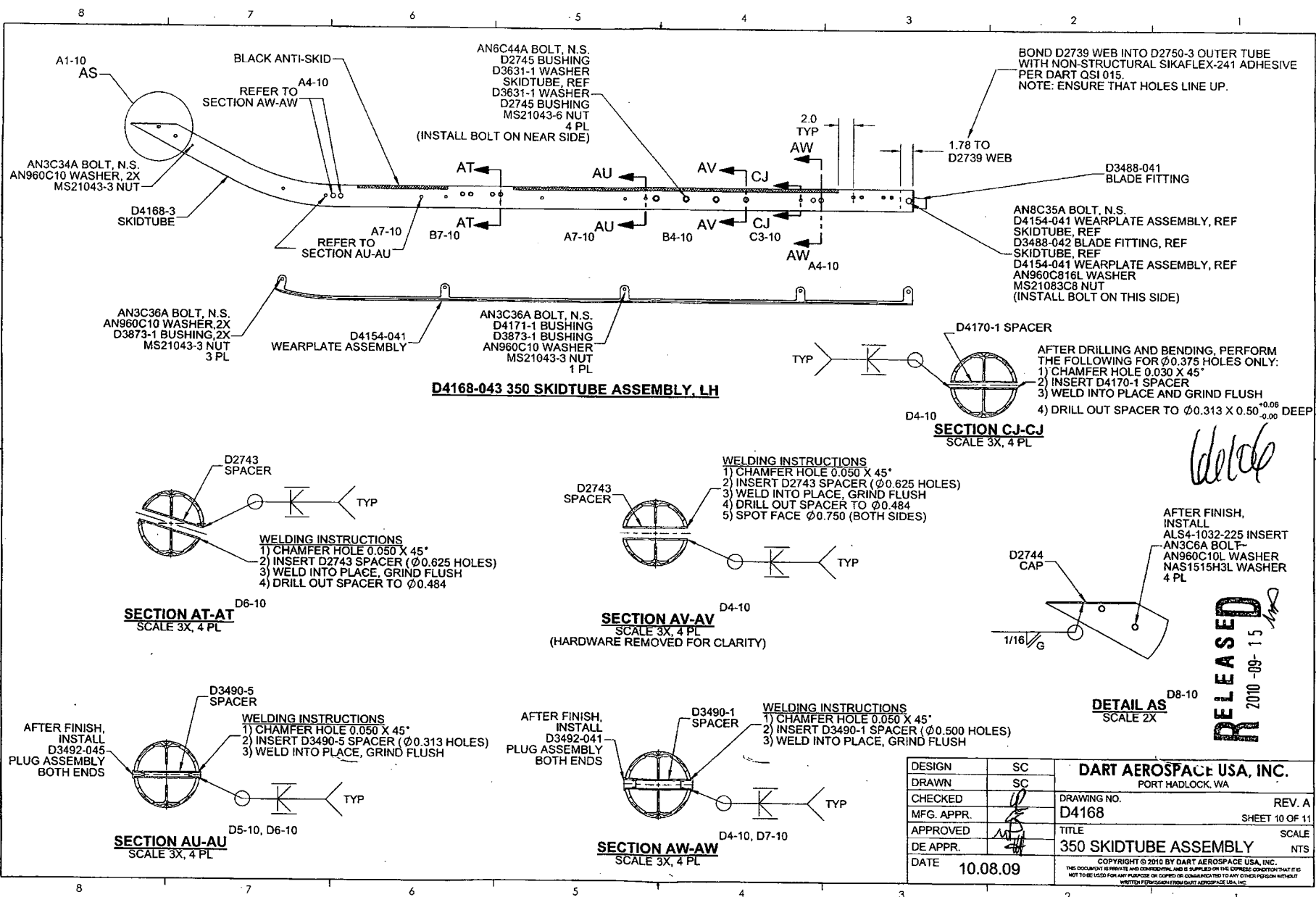
**RELEASED**  
2010-09-15

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 7 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

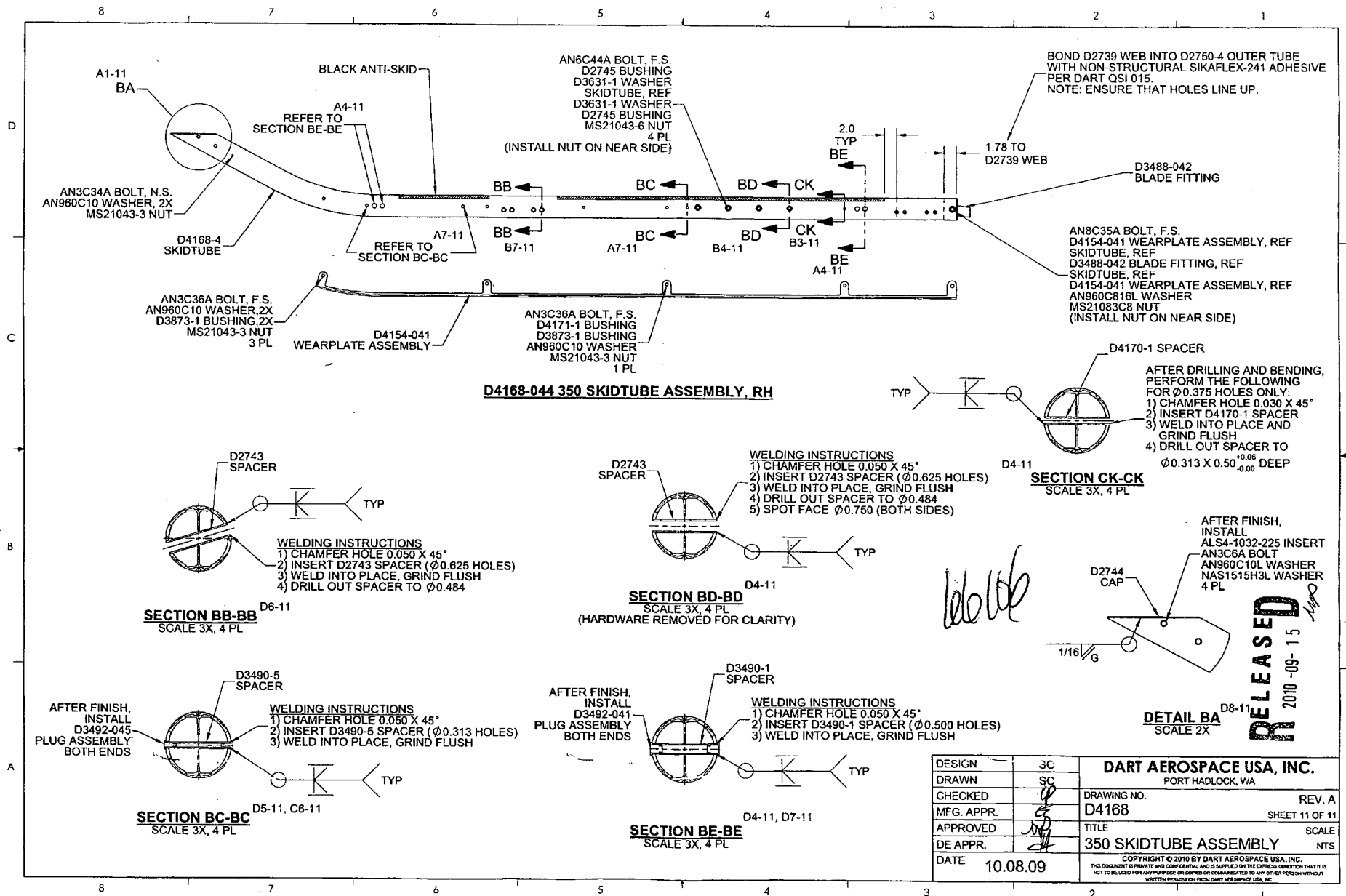
8 7 6 5 4 3 2 1







DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 10 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	





NO. 243

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barkley Elliott  
Job number: ~~64950~~ 64953  
Part number: J350-636-016  
Description: 350 skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminum  
Current: AC[ ] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier Salvatore Date of Test Coupon 11-01-18

Welder Barkley Elliott Date of Test Coupon 11-01-18

The above named individual is qualified in accordance with AWS D17.1.2001 to weld